ABSTRACT

The present disclosure is directed to multiple-contact woven power connectors that have at least a first set of loading fibers and at least a first set of conductors. When woven onto a set of loading fibers, the conductors define a space. The loading fibers are capable of delivering contact forces at the contact points of the conductors. The conductors can comprise a power circuit or a return circuit. The power connectors may also include tensioning springs that are capable of generating tensile loads within the loading fibers. The power connectors may further include mating conductors that can be coupled to the power/return circuits. When disposed within the first and second spaces, respectively, electrical connections between the conductors and the mating conductors can be established.